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# AN ORDINANCE AMENDING CHAPTER \_\_\_\_\_ OF ORDINANCE NO.\_\_\_\_ BEING THE UNIFIED ZONING ORDINANCE OF TIPPECANOE COUNTY.

**Be it ordained** by the (County Commissioners of Tippecanoe County, Indiana; the Common Council of the City of Lafayette, Indiana; the Common Council of the City of West Lafayette, Indiana; the Town Council of the Town of Battle Ground, Indiana; the Town Council of the Town of Dayton, Indiana; and the Town Council of Clarks Hill, Indiana), that Ordinance No.\_\_\_\_\_, being the Unified Zoning Ordinance of Tippecanoe County is hereby amended as follows:

**Section 1:** Change **UZO Section 1-10-2 Words and Terms Defined** to add the following definitions:

Large Wind System. A WECS that has a nameplate capacity (manufacturer's rating) of more than 50 kilowatts per wind tower, or a total height of more than 140', or a swept area of more than 40'. Any WECS meeting one or more of these criteria shall be considered a large wind system.

**Micro Wind System.** A building-mounted wind system that has a nameplate capacity (manufacturer's rating) of 10 kilowatts or less, and projects no more than 15' above the highest point of the roof; such building-mounted wind systems shall not be considered a **wind energy conversion system**. **Micro wind systems** are subject to UZO section 4-11-11 but only numbers (1), (11), (17) and (18).

**Small Wind System.** A *WECS* that has a nameplate capacity (manufacturer's rating) less than or equal to 50 kilowatts per *wind tower*, and a *total height* of 140' or less, and a *swept area* of 40' or less.

**Swept area.** The diameter of the least circle encompassing all blades for a **WECS**.

**Total height**. Regarding **WECS**, the distance measured from the ground level at the base of the tower to the highest extension of the blade or rotor.

**Wind Energy Conversion System (WECS).** The equipment that converts and then stores or transfers energy from the wind into usable forms of energy and includes any base, blade, foundation, generator, nacelle, rotor, **wind tower**, transformer, turbine, vane, **wind farm collection system**, wire, or other component used in the system.

**Wind Farm.** Two or more *large wind systems* on a single property *or* aggregated properties.

**Wind Farm Collection System.** All the low-voltage wiring and cabling connecting any wind turbine with another wind turbine or to a place where voltage is stepped up, commonly known as a substation or switching station.

**Wind Tower.** The monopole, freestanding, or guyed **structure** that supports the energy capture, conversion, storage and transfer components of a **WECS**. These **wind towers** are not attached to any **building**.

#### **Section 2:** Change **UZO 3-2 Primary Use Table** by adding the following:

Parking Groups	Special Conditions			NB NBU OR MR GB HB CB CBW	I1 I2 I3	A AA AW RE				
3-2-6 Transportation, Communications, Electrical, Gas and Sanitary Services:										
8	4-4-11		"Large Wind System" <sup>19</sup>	S	S	SSS				
8	4-4-11		"Wind Farm" 19	S	S	S S S				

## Section 3: Change UZO 4-1 (b) Accessory Uses, Accessory Structures and Accessory Buildings to include:

- (27) **small wind systems** (only in commercial, industrial and rural zones as regulated in 4-11-11)
- (28) *micro wind systems* (standard)

## Section 4: Change UZO 4-1 (c) Accessory Uses, Accessory Structures and Accessory Buildings to include:

- (25) **small wind systems** (only in commercial, industrial and rural zones as regulated in 4-11-11)
- (26) *micro wind systems* (standard)

### **Section 5:** Add **UZO 4-11-11 Wind Energy Systems** as follows:

- 1. All **WECS** are subject to the air space control height and use restrictions surrounding airports per UZO 5-3, Air Space control.
- 2. No **WECS** shall be illuminated unless required by a state or federal agency, such as the FAA.
- 3. The exterior surface of all **WECS**, including the **wind tower** and associated outbuildings shall be a non-reflective, neutral color.
- 4. Minimum clearance between blade tip and ground level is 30'.

- 5. The minimum separation distance between a wind tower associated with a small wind system and all surrounding property lines, overhead utility or transmission lines, other electrical substations, meteorological towers and primary communications towers shall be no less than the total height of the wind tower. This is measured from the base of each wind tower.
- 6. The minimum **setback** between a **wind tower** associated with a **small wind system** and **public street(s)** shall be no less than the **total height** of the **wind tower**.
- 7. The minimum separation distance between a *wind tower* associated with a *large wind system* and all surrounding property lines, overhead utility or transmission lines, other electrical substations, meteorological towers and *primary communications towers* shall be no less than 1.1 times the *total height* of the *wind tower*. This is measured from the base of each *wind tower*.
- 8. The minimum **setback** between a **wind tower** associated with a **large wind system** and **public street(s)** shall be no less than 1.1 times the **total height** of the **wind tower**.
- 9. Large wind system(s) must be located at least 1000' from any dwelling unit, except dwelling unit(s) located on-site. Dwelling unit(s) located adjacent to and off-site from a large wind system shall maintain these same minimum separation requirements. No dwelling unit shall be built less than 1000' from any existing large wind system.
- 10. **Wind Farms** occupying multiple parcels may have internal property line setbacks waived by execution of a written document signed by all land owners sharing such a property line. All such documents shall be recorded in the office of the Tippecanoe County Recorder.
- 11. All **WECS** shall be located so that the level of noise produced by wind turbine operation heard off-site shall not exceed 55 dBA.
- 12. The base of all **WECS**, including any guy wires and **wind tower**, shall be totally and permanently enclosed by a security fence at least 6' high. No fence is required if the climbing apparatus is enclosed inside the **wind tower** and the entry is secured, or if the climbing apparatus is located at least 12' above the ground level.
- 13. **WECS** and their associated outbuildings/cabinets shall meet all **setback** requirements for primary **structures** for the zoning district in which the **WECS** is located.

- 14. Special exception applications and Improvement Location Permit applications for a large wind system or a wind farm must be accompanied by a decommissioning plan detailing how the large wind system or wind farm will be dismantled and the land restored to its prior state. Such plan would be implemented when such large wind system or wind farm ceases operation for a period of 12 months, with or without notification to the Administrative Officer. The plan would include the removal of all portions of the WECS, including any components up to 4' below ground level. The decommissioning must be complete within 6 months.
- 15. All **WECS** shall be equipped with a manual and automatic braking device capable of halting operation.
- 16. All wiring for *wind farm collection system* shall be buried.
- 17. No **WECS** shall be installed in any location where its proximity with fixed broadcast, retransmission or reception antenna for radio, airport RF signals, television or wireless phone, or other personal communications systems would produce electromagnetic interference with signal transmission or reception.
- 18. All **WECS** electrical equipment and connections must adhere to all applicable local, state, and national codes, and relevant national and international standards.

This ordinance shall be in full force and effect from and after its passage.